In The Claims:

1 (Original). A catalytic combustor comprising:

a plurality of catalytic combustion modules circumferentially disposed about a central axis radially outward of a central core region, for receiving a fuel flow and an oxidizer flow and for discharging a partially oxidized fuel/oxidizer mixture at respective exit ends, the central core region containing no burner apparatus;

a burnout zone disposed downstream of the exit ends for receiving the partially oxidized fuel/oxidizer mixture and for completing oxidation of the partially oxidized fuel/oxidizer mixture; and

a base plate positioned in the central core region upstream of the respective exit ends of the plurality of catalytic combustion modules, the baseplate and the respective exit ends defining a recirculation zone for the partially oxidized fuel/oxidizer mixture for stabilizing oxidation in the burnout zone.

2 (Original). The combustor of claim 1, wherein the recirculation zone is disposed along the central axis.

3 (Original). The combustor of claim 1, further comprising a fuel flow controller for independently controlling the fuel flow to at least one of the catalytic combustion modules independently of other catalytic combustion modules, the fuel flow controller responsive to a turbine load condition.

4 (Original). The combustor of claim 1, the base plate further comprising an aperture for allowing passage of a portion of the oxidizer flow into the burnout zone bypassing the plurality of catalytic modules.

5 (Original). The combustor of claim 1, further comprising an igniter positioned proximate the baseplate.

6 (Currently Amended). The combustor of claim 1, wherein the base plate is positioned about one to two inches (2.54 to 5.08 centimeters) upstream of the respective exit ends.

7 (Original). A gas turbine engine comprising:

a compressor;

a turbine; and

a catalytic combustor comprising a plurality of catalytic combustion modules circumferentially disposed about a central axis radially outward of a central core region, for receiving a fuel flow and an oxidizer flow and for discharging a partially oxidized fuel/oxidizer mixture at respective exit ends, the central core region containing no burner apparatus; a burnout zone disposed downstream of the exit ends for receiving the partially oxidized fuel/oxidizer mixture and for completing oxidation of the partially oxidized fuel/oxidizer mixture; and a base plate positioned in the central core region upstream of the respective exit ends of the plurality of catalytic combustion modules, the baseplate and the respective exit ends defining a recirculation zone for the partially oxidized fuel/oxidizer mixture for stabilizing oxidation in the burnout zone.

8 (Original). The gas turbine engine of claim 7, wherein the recirculation zone is disposed along the central axis.

9 (Original). The gas turbine engine of claim 7, further comprising a fuel flow controller for independently controlling the fuel flow to at least one of the catalytic combustion modules independently of other catalytic combustion modules, the fuel flow controller responsive to a turbine load condition.

10 (Original). The gas turbine engine of claim 7, the base plate further comprising an aperture for allowing passage of a portion of the oxidizer flow into the burnout zone bypassing the plurality of catalytic modules.

11 (Original). The gas turbine engine of claim 7, further comprising an igniter positioned proximate the baseplate.

12 (Original). The gas turbine engine of claim 7, wherein the base plate is positioned about one to two inches (2.54 to 5.08 centimeters) upstream of the respective exit ends.